1204-5

# SKYLUX Shuorescent

PLAN - A - LINE SYSTEM





# PLAN-A-LINE SYSTEM

# PROVIDES FOR FUTURE HIGHER INTENSITIES

The fluorescent lamp is here to stay . . . and to become our most commonly used light source. The ideal of natural daylight—1,000 or more foot candles—is still far away, but the greater efficiency of the fluorescent lamp has introduced much higher lighting levels than have been economically practical up until now.

The fluorescent lamp is fast becoming the accepted source of light for commercial interiors, and the higher levels of illumination being installed today are only a "stepping stone" to the standards of the near future.

Realizing this Curtis has designed SkyLux so that increases in lighting levels can be made at any time after the original installation without discarding existing equipment and without cluttering up ceilings.

# ADD A LIGHT FEATURE

(Illustrations 1 and 2)

Given an office 17' x 45': The manager wants first class lighting, but his budget doesn't permit purchase of all necessary equipment at one time. Double-section Twin SkyLux luminaires are installed. Exact space for two sections of SkyLux is left between luminaire ends.

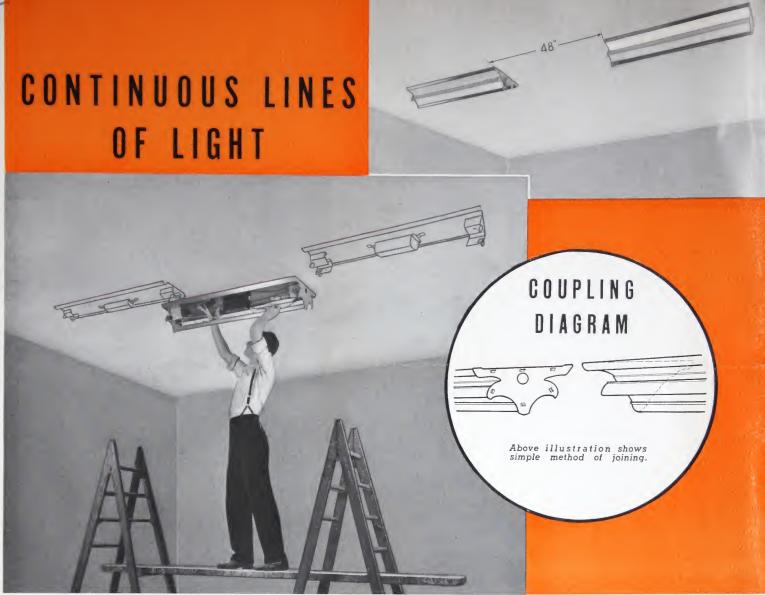
After a year, the manager completes the installation by adding SkyLux extension sections to make continuous runs. This brings lighting levels up to par and provides a streamlined installation.

### ADD A ROW FEATURE

(Illustrations 3 and 4)

Given a store 35' x 70': One row of Twin SkyLux and two rows of Single SkyLux are used, (see layout No. 3). Later it is desirable to step up the illumination because higher lighting levels are being used by competitors. Two rows of Twin SkyLux are added (see layout No. 4) without cluttering up the ceiling, without any sacrifice of existing equipment, and with a minimum of new outlets.





SkyLux equipment is designed according to the principles of the new lighting era—for installation in continuous runs as well as in individual luminaire layouts. One wiring outlet is all that is needed for a unit or for an entire run. Basic units and extension sections can be coupled together at the time of the original installation, or after an initial job of individual SkyLux luminaires has been installed the units can be converted into continuous runs by adding extension sections.

Because of the exclusive Curtis Plan-a-Line feature this can be accomplished without the expense of replacing the original equipment, and without costly new wiring outlets. It is necessary only for the Lighting Specialist to plan for the future additions when making the original layouts.

# Adding Additional Units Later

Each basic section of SkyLux is 48%" long and includes two decorative ends. Each extension section is 48-1/16" and is identical with the basic section ex-

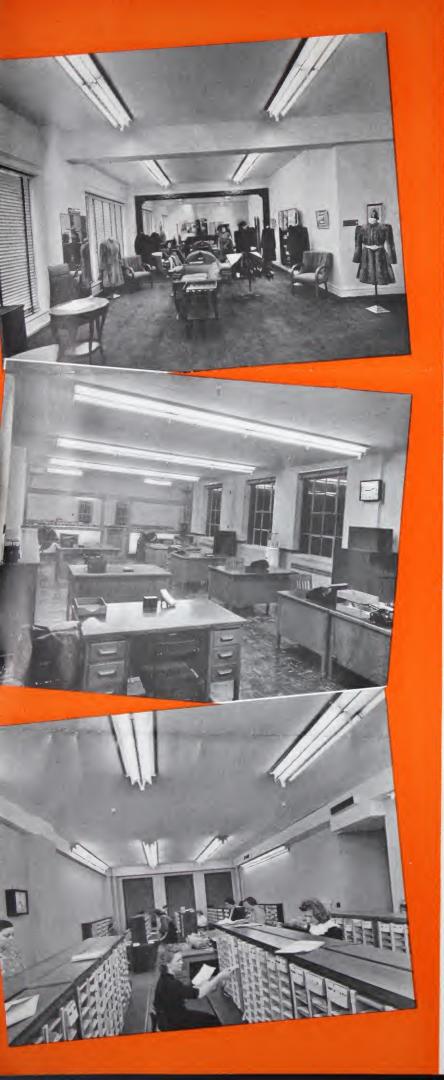
cept that in place of the decorative end plates, it has one intermediary plate.

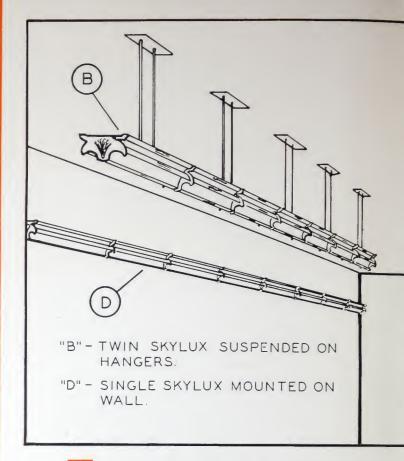
Note that the intermediary plates which are used for continuous runs are  $1/16^{\prime\prime}$  thick. Accordingly, if it is planned to fill in with additional units later, 48 $^{\prime\prime}$  must be left for one unit or 96  $1/16^{\prime\prime}$  for two. These measurements should be taken at ceiling line. See photo diagram at upper right.

# BEST FOR THE MONEY . . . And the Best Money Can Buy

There is lighting equipment on the market which is more expensive but none so genuinely impressive, or so well designed to do its job with lasting efficiency as SkyLux.

A store or office lighted with SkyLux gives the effect of crisp efficiency with comfort and coolness. The lighting fixtures blend unobtrusively into the room and are quietly beautiful. The artists and engineers who designed SkyLux have achieved just the right balance between decoration and refinement.





# 7 ADVANTAGES

# 1. Brings daylight indoors

Ideal for offices, stores, and interiors where eye-taxing work is carried on ... ideal for color display and all types of merchandising. Fluorescent lighting is as easy on the eyes as natural daylight, reveals colors with astounding accuracy.

# **2.** Comfortable light . . .

from shielded fluorescent lamps (see explanation of shielding, page F-212.)

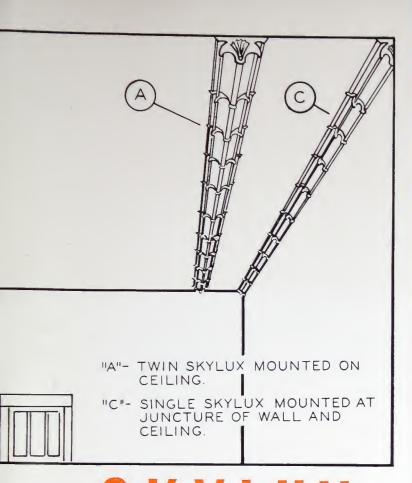
# 3. Quantity of light

The SkyLux design has been engineered to produce maximum illumination on the working plane. There is no loss of light through crowding of lamps. Further, fluorescent lamps produce 2 to 4 times more light per watt than standard incandescent lamps.

# 4. Cool light

SkyLux fluorescent lighting is 50% cooler than incandescent lighting,

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# OF SKYLUX

lumen for lumen. In air conditioned interiors SkyLux means a tremendous saving in the necessary cooling capacity and operating cost. In interiors without air conditioning, temperatures will be substantially reduced by lighting with SkyLux.

# 5. Engineered light control

SkyLux reflectors and shields are scientifically designed to direct the majority of light down on the working or selling surface.

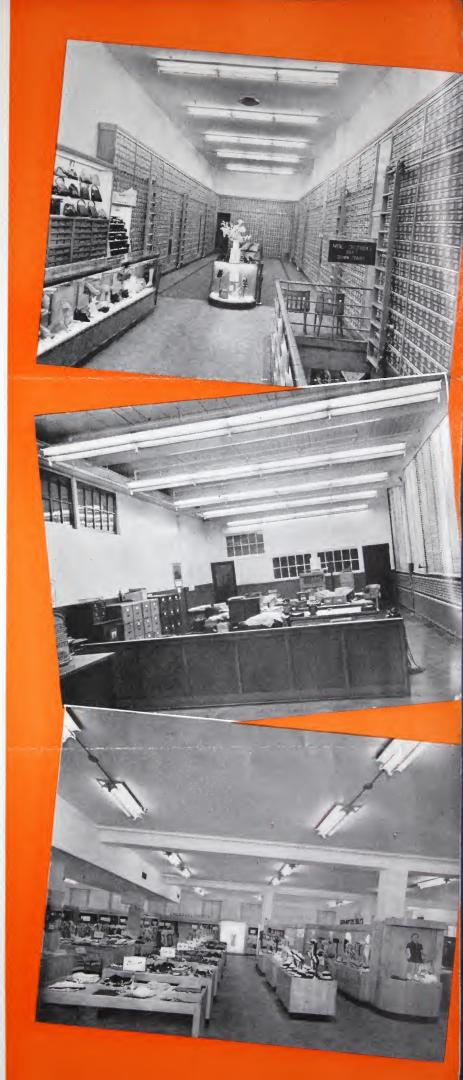
# 6. Unique Plan-a-Line feature

Without new wiring outlets or replacing original equipment, fixtures (once installed) can be easily converted into continuous lines of light. Both types of SkyLux luminaires have extension sections.

# 7. Beautiful appearance

Grace and refinement of line plus the interesting SkyLux finishes add substantially to the attractiveness of any interior.

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# CURTIS SKYLUX

# Single

# FLUORESCENT LUMINAIRE

# PLANNING WITH SKYLUX FOOTCANDLE CHARTS

Following information applies to charts on this page and page F-208

The application of continuous fluorescent sources to general lighting problems is some what different than planning for luminaires on conventional outlet spacing. For this reason the footcandle charts shown have been prepared.

Constant footcandle values are obtained under a continuous section at points more than 12' in from either end. At the end of a long section, the values are one-half of those under the center of a long section.

The location of a typical reading is shown by "X" on the charts. The upper portion of the footcandle charts shows a plan view and rooms drawn to the same scale may be superimposed on the charts and the footcandles obtained by inspection.

The lower portion of the chart shows how the intensities under single and continuous sections vary with mounting height. It is easy to determine the intensities between continuous sections by the use of the data given.

The charts have been compiled from tests on units mounted on a fairly light ceiling and are based on lamps of 2100 lumens which is the present rated lumen output for 40-watt white lamps.

All values are for white lamps. For daylight lamps decrease values by  $15\,^{\circ}{}_{\circ}$ .

A maintenance factor of 75% to 80% is suggested. This means the footcandle values over a period of time will be 75% to 80% of those given in the tables.

# APPROXIMATE FOOT CANDLE VALUES

For large interiors with average ceiling heights each watt (including ballasts) per square foot of floor area, will produce approximately 15 to 20 footcandles including a depreciation factor. For smaller rooms for each watt per square foot an average of 12 to 15 cotcandles will result.

FOOT - CANDLE READINGS ON HORIZONTAL PLANE FOR ONE 40 WATT WHITE LAMP - ALSO CONTINUOUS SECTION PLAN MOUNTING CONTINUOUS SCALE 1/8" = 1' HEIGHT 8' BEYOND END OF CONTINUOUS SECTION 4' BEYOND END OF CONTINUOUS SECTION 121-END OF A SECTION 12' OR LONGER 4 N FROM END OF CONTINUOUS SECTION 8 IN FROM END OF CONTINUOUS SECTION 12' OR MORE IN FROM THE END OF ELEVATION BASIC UNIT SCALE 1/8" =1" ALSO CONTINUOUS SECTION READINGS ON READINGS ON CENTER LINE CENTER LINE AT PARALLEL TO LAMP 6 1-40 CONT 9 12' 1-40 101 81 61 21 01 101

Page F-206



1. FLURACITE REFLECTOR

LAMP SHIELD

. FLUORESCENT LAMP

TWO SECTION SINGLE SKYLUX

Patents Applied for

# SPECIFICATION ON Single SKYLUX

Single SkyLux luminaires are for mounting along the right angle juncture of the wall and ceiling, or for mounting horizontally on the wall below the ceiling line.

LAMPS: One 40-watt 48" fluorescent lamp per section.

TOTAL WATTS (including ballast) per section: on 110-125 volts AC is 53 watts with Single-lamp ballast or 49 watts with Tulamp ballast. On 220-250 volts AC is 52 watts with single lamp ballast or 47 watts in the Tulamp ballast.

DIMENSIONS: Overall height 7"; width  $8\frac{1}{2}$ "; each basic section is  $48\frac{7}{6}$ " in length and each extension section used will add  $48\frac{1}{16}$ " to the total length when assembled.

### SATIN SILVERTONE FINISH

Refreshingly cool and good-looking

Basic "Single" Section Moldings and lamp shield finished Satin Silvertone. The two decorative end plates with decorative die castings are aluminum lacquer.

Extension Section\* Identical with basic unit except no end plates are included and one intermediary plate is added. Moldings and lamp shields are finished Satin Silvertone.

Basic Units Cat.	Extension Sections Nos.	Description		
891	892	Do not include lamps, wire, ballast, starting compensator or FS-4 Starters.		
891C	892C	Wired, including high power factorf ballast for 60 cycle 110-125 V.		
891D	892D	Wired, including high power factorf ballast for 60 cycle 220-250 V.		

# SATIN BRASS AND ALUMINUM FINISH

LISTED BY UNDERWRITERS CERTIFIED FLEUR-O-LIER

Decorative and Attractive

Basic Single Section Moldings and lamp shield finished Satin Brass. Two end plates are aluminum lacquer and decorative die castings are bronze lacquer.

Extension Section\* Identical with basic section except no end plates are included and an intermediary plate is added. Moldings and lamp shield are finished Satin Brass.

Basic Units Cat.	Extension Sections Nos.	Description
893	894	Do not include lamps, wire, ballasts, starting compensator or the FS-4 Starter plug.
893C	894C	Wired, including high power factorf ballast for 60 cycle 110-125 V.
893D	894D	Wired, including high power factor† ballast for 60 cycle 220-250 V.

# FLURACITE REFLECTING SURFACE

Fluracite on steel. This reflecting surface is a synthetic material, glossy white and mineral-hard, discovered by Curtis after extensive research—especially developed to maintain, and not distort, the color value of the fluorescent lamp. Fluracite possesses unusually high reflectivity and is easily cleaned with soap and water.

## HOW TO MAKE CONTINUOUS RUNS

To join, one end plate is removed from the basic unit and the extension section is coupled on by means of the intermediary plate (see illustration above). Additional extension sections may be added to complete required length and at the end of the run the removed end plate is used to complete the fixture.

Thus, when planning the eventual conversion of lines of individual SkyLux luminaires into continuous runs, the Lighting Specialist should lay out the units at exact intervals to allow extension section to be inserted between them. (See Page F203.)

\*Note paragraph below "How to Make Continuous Runs"

†90% or higher High Power Factor is recommended. Use low power factor units where central power factor correction is employed.

# CURTIS SKYLUX

# Twin

# FLUORESCENT LUMINAIRE

# TWIN SKYLUX FOOTCANDLE CHARTS

Footcandles for Twin SkyLux may be calculated from the charts or by the "Coefficient of Utilization" method using the table directly below. If louver Catalog No. 12402 is used average values will be reduced about 13%. For information on the charts see Page F-206.

CEILING	75%		50%			30%		
WALLS	50%	30%	10%	50%	30%	10%	30%	10%
ROOM	COEFFICIENTS OF UTILIZATION							
J	31	26	23	30	25	22	25	22
1	35	30	27	32	30	26	30	26
H	39	34	31	38	33	30	33	30
G	43	38	35	42	38	34	35	34
F	49	42	38	48	41	37	40	37
E	52	48	45	51	47	44	46	43
D	57	53	49	55	51	48	50	47
C	60	57	53	58	55	52	54	52
8	62	59	56	60	58	55	56	55
A	66	62	59	61	60	58	59	57

# APPROXIMATE FOOT CANDLE VALUES

For large interiors with average ceiling heights each watt (including ballasts) per square foot of floor area, will produce approximately 15 to 20 footcandles, including a depreciation factor. For smaller rooms for each watt per square foot an average 12 to 15 footcandles will result.

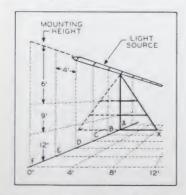
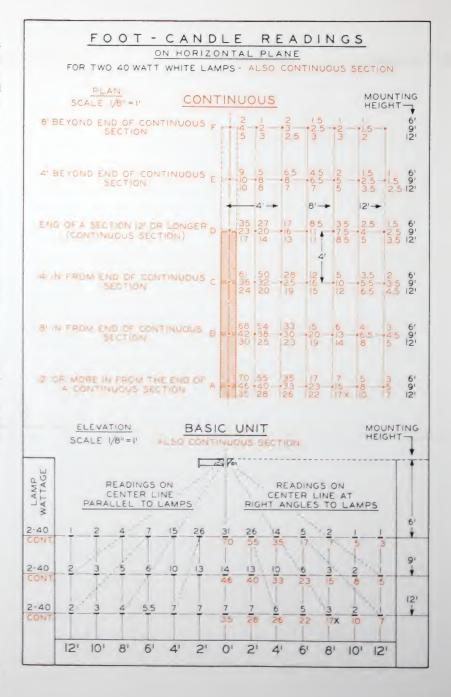


Diagram to illustrate relation of long section to reading points such as "X" in the charts.

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TWO SECTION
TWIN SKYLUX

Patents Applied for

# SPECIFICATIONS ON Twin SKYLUX

Twin SkyLux luminaires are for mounting on ceiling or for suspension on hangers.

LAMPS: Two 40-watt 48" long fluorescent lamps per section.

TOTAL WATTS (including two-lamp ballast) per section: 110-125 volts AC is  $97\,\%$  watts; 220-250 volts AC is  $94\,\%$  watts.

<code>DIMENSIONS:</code> Overall height 7"; width  $15\,\%2$ "; each basic section is  $48\,\%8$ " in length and each extension section used will add 48-1/16" to the total length when assembled.

### SATIN SILVERTONE FINISH

Refreshingly cool and good looking

Basic Twin Section: Moldings and lamp shields finished Satin Silvertone. The two decorative end plates with decorative die castings are aluminum lacquer.

Extension Section\* Identical with basic unit except no end plates are included and one intermediary plate is added. Moldings and lamp shields are finished Satin Silvertone.

Basic Units Cat.	Extension Sections Nos.	Description
895	896	Do not include lamps, wire, ballast, starting compensator or FS-4 Starters.
895C	896C	Wired, including high power factor† ballast for 60 cycle 110-125 V.
895D	896D	Wired, including high power factor† ballast for 60 cycle 220-250 V.

# SATIN BRASS AND ALUMINUM FINISH

Decorative and Attractive

Basic Twin Section Moldings and lamp shields finished Satin Brass. Two end plates are aluminum lacquer with decorative die castings in bronze lacquer.

Extension Section\* Identical with basic section except no end plates are included and an intermediary plate is added. Moldings and lamp shields are finished Satin Brass.

Basic Units Cat.	Extension Sections Nos.	Description	
897	898	Do not include lamps, wire, ballast starting compensator or FS-4 starter plug.	
897C	898C	Wired, including high power factor† ballast for 60 cycle 110-125 V.	
897D	898D	Wired, including high power factor† ballast for 60 cycle 220-250 V.	

### FLURACITE REFLECTING SURFACE

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### HOW TO MAKE CONTINUOUS RUNS

To join, one end plate is removed from the basic unit and the extension section is coupled on by means of the intermediary plate (see illustration above). Additional extension sections may be added to required length and at the end of the run the removed end plate is used to complete the luminaire.

Thus, when planning the eventual conversion of lines of individual SkyLux luminaires into continuous runs, the Lighting Specialist should lay out the units at exact intervals to allow extension section to be inserted between them. (See Page F203.)

\*Note paragraph below "How to Make Continuous Runs"

†90% or higher, High Power Factor is recommended. Use low power factor units where central power factor correction is employed.

# SKYLUX Accessories... HANGERS FOR SUSPENDING TWIN SKYLUX——



TWIN SKYLUX IS DESIGNED FOR SUSPENDING or for ceiling mounting. It is advisable to use hangers to suspend Twin SkyLux at a desirable height above the working or selling level under certain structural conditions. These conditions are: (1) When interior is high\* and narrow. (2) When the ceiling is sloping.

Three types of hangers are available for suspending Twin SkyLux (1) One-stem hanger. (2) Two-Stem plain hanger. (3) Two-stem decorative hanger.

SPECIAL SUSPENSION LENGTHS. Standard suspension is 36". Longer hangers than those shown are available. Write for information.

GENERAL RULE FOR NUMBER OF TWO-STEM HANGERS REQUIRED. All one, two and three section luminaires will require one hanger for each section. Luminaires of more than three sections must have Two-stem hangers spaced never more than 6 feet apart. Hangers may be attached either through the center set of knockouts provided or through the pair formed by joining two sections.

\*A high ceiling is normally considered 14 or more feet.



# ONE-STEM HANGER CATALOG No. 624

This hanger is composed of a single steel stem with a self-aligning canopy fitting. The lower end is threaded and a lock nut, two heavy washers, and clamping nut are included. A knockout in the top of SkyLux is provided for fastening to stem. Finish: Satin Silvertone to blend with SkyLux units.

### ONE-STEM HANGERS REQUIRED

Two hangers are needed to support a 48" section of SkyLux. One hanger is required to support each 48" section when two or more sections are joined together.

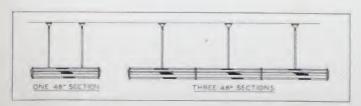


# TWO-STEM PLAIN HANGER CATALOG No. 625

This hanger consists of two steel tube stems with 5%" outside diameter and finished Satin Silvertone. Tailored canopy is aluminum lacquered. Heavy nuts and washers are provided for the end of each stem. Stems are threaded for attaching through knockouts in top of SkyLux.

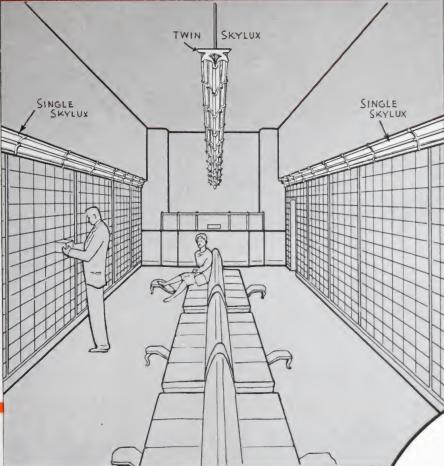
### TWO-STEM HANGERS REQUIRED

The following illustration shows the principle by which the installer finds the minimum number of hangers needed for suspending fixtures of one to seven sections in length. Longer runs can be figured from the general rule above.





# AND LOUVER FINS



# ACCESSORY LOUVER FINS

To shield the lamps from being viewed lengthwise in addition to the crosswise shielding regularly provided, louvers may be ordered separately.

The type of installation in which the use of louvers is advisable is when SkyLux is mounted lengthwise in a long, comparatively low-ceilinged interior.

DESCRIPTION: The louver has 10 fins mounted at even intervals of 4¾" on a supporting member. The assembly is attached by two soft metal hooks over the top of the shield and is easily removed for lamp replacement.

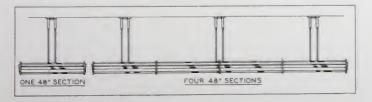
# TWO-STEM DECORATIVE HANGER CATALOG NO. 623



FINISH: Aluminum and Golden Brass. The aluminum stems conceal ¼" iron pipe which attaches to SkyLux by means of locknuts through knockouts provided for this purpose. These stems can be readily shortened by cutting off the iron pipe at the top and rethreading with standard thread, the aluminum sleeves being shortened a like amount.

### NUMBER OF HANGERS REQUIRED

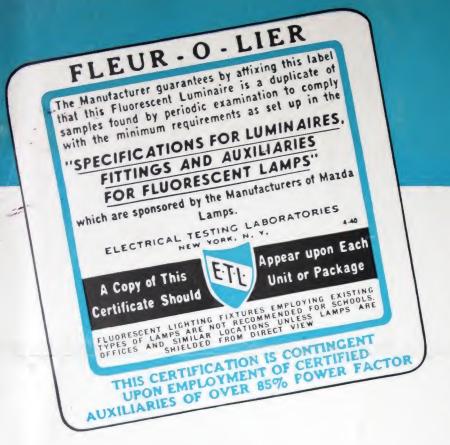
The following illustration shows the principle by which the installer finds the minimum number of hangers needed for suspending fixtures of one to seven sections in length. Longer runs can be figured from the general rule on Page F210.



# LOUVER ASSEMBLY CAT NO. 12402

## ONE LOUVER ASSEMBLY PER LAMP

The louver fins are constructed of steel, aluminum lacquered. This blends well with SkyLux finishes.



# SKYLUX

BEARS THE FLEUR-O-LIER MANUFACTURERS' LABEL LISTED BY UNDERWRITERS LABORATORIES, INC.

For over 40 years, the Curtis name in the lighting field has stood for high quality and scientific design. With the Fluorescent SkyLux line, Curtis is offering two new top-notch luminaires embodying the best engineered lighting principles. SkyLux luminaires meet the stringent specifications of the Electrical Testing Laboratories.

# SKYLUX LAMP SHIELDS

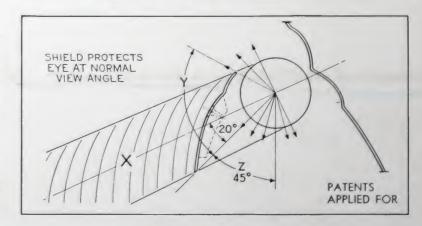
# protect your Eyes and direct the Light where it's needed

Unshielded fluorescent lamps do not provide acceptable lighting when continuously in the field of view, and various plans for shielding or diffusion have been almost universally adopted.

The SkyLux plan, exclusive with Curtis, permits extremely high efficiency with minimum maintenance. The SkyLux shield prevents a direct view of the lamp at ordinary angles and at the same time its inner surface of Fluracite serves as a reflector to direct the light downward.

Note, in the cross-section drawing the precise but simple relation between the reflector, the lamp, and the shield. There is no crowding of the lamp to trap light and no horizontal

surfaces to collect dust. These features and the high efficiency Fluracite reflecting surface insure a high initial light output and what is more important, high average light output throughout the life of the fixture.



SERIAL NO. 1050, Page F-212

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# Curtis Lighting, Inc.

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